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APPROVAL OF UNDP ASSISTANCE TO A PROJECT OF SYRIAN ARAB REPUBLIC

IPF:(1987-91) $8 864 000

(SYR/90/001) - Improved Management of Water Resources for Agricultural Use (Phase II)

Date of approval by the AC:[1/]	20 February 1991
Expected duration:	Four years
Proposed executing agency:	FAO
Government implementing agency:	Directorate of Water Management (Ministry of Agriculture and Agrarian Reform) (DWM)
Proposed UNDP contribution:	$ 1 074 000 Source of funds: IPF

Project background

The Syrian economy is heavily dependent on agriculture, which in turn has depended heavily on rainfall. In 1987, Syria was affected by a serious drought and the real GDP declined by about 9.3 per cent. Rainfall was ample in 1988 and the real GDP expanded by 11 per cent, propelled by a 31 per cent growth rate in the agricultural sector. The year 1989 saw another drought which resulted in declining GDP. Such drought years over the last two decades have highlighted the critical need to develop areas of irrigated agriculture in order to increase output and smooth out wide fluctuations in harvests. Consequently, Syria has increased its irrigated area from 531,000 hectares in 1977 to 719,000 hectares in 1990, an average annual increase of 14,480 hectares.

Whereas irrigated areas now comprise 12.4 per cent of the total cropped area, they account for about 50 per cent of the value of agricultural production. It is because of irrigation's obvious importance that the latest National Development Plan attaches highest priority to increasing the contribution of the irrigation sub-sector. With a population increasing by as much as 3.4 per cent per annum it is clear that agricultural production, and hence irrigated production, must be increased to at least meet the food demand of the population. This can be done through expanding irrigated areas and increasing crop intensity, each of which requires additional irrigation water.

[1/] This Fact Sheet reflects the status of the project/revision at the time it was approved by the Action Committee; modifications to the project/revision may have occurred subsequently.

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In Syria, traditional methods of irrigation still dominate resulting in a very poor water-use efficiency of 45-50 per cent and the predominance of associated problems such as water logging and salinization. Of the water losses from source to destination in Syria, it is estimated that 10-15 per cent is lost in the irrigation system (storage, conveyance, distribution) and 35-40 per cent on farmers' fields. Introducing advanced irrigation methods has the potential to raise on-farm water-use efficiency to 80-90 per cent, which with conveyance losses at 15 per cent, results in an increase in overall efficiency from 50 per cent to 68-77 per cent. At the current rate of water use, each per cent increase in efficiency has a potential water saving of 127 million cubic metres per annum.

In 1987, the Government requested UNDP to assist the newly established DWM with the introduction and demonstration of modern irrigation technology at seven experimental stations. Only three of the sites could be assisted through a first phase (SYR/86/015) which began operations in 1988 and ended in 1990. The project was evaluated in 1990 by an in-depth tripartite evaluation mission which concluded that a second phase of UNDP assistance was fully justified given the need to cover the remaining four stations and to further consolidate farmer utilization of improved irrigation techniques.

Description of project

The immediate objective of the project is to introduce advanced on-farm irrigation methods, as well as precision levelling to improve surface irrigation methods of field crops and raise the irrigation efficiency of the demonstration fields. Project activities will include: (a) consolidating the institutional capabilities of the DWM so that it can conduct experimental research pertaining to on-farm water management; (b) increasing the capacity of the Agricultural Extension Service to introduce on-farm water management techniques to all farmers; and (c) establishing the economic and technical superiority of advanced on-farm irrigation methods.

Inputs

UNDP will provide senior consultancies (18 work-months) in water management/transfer of technology, protected cultivation, socio-economic analysis and environmental assessment; two UNVs in water management and computer operations; group and in-training; and procurement of irrigation, levelling and laboratory equipment as well as irrigation units for the Revolving Fund.

Financial data

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Personnel	423 000
Training	100 000
Equipment	368 000
Miscellaneous	183 000
Total	1 074 000

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